
Workforce Training Results 1998

An Evaluation

*of Washington
State's Workforce
Training System*

EXECUTIVE SUMMARY

WORKFORCE TRAINING AND EDUCATION COORDINATING BOARD

The Vision

The Workforce Training and Education Coordinating Board is Washington State's valued and trusted source of leadership for the workforce training and education system.

Mission Statement

The Workforce Training and Education Coordinating Board's mission is to bring business, labor, and the public sector together to shape strategies to best meet the workforce training needs of all of Washington's students, workers, and employers in order to create and sustain a high-skill, high-wage economy.

To fulfill this mission, Board members and staff work together to:

- Advise the Governor and Legislature on workforce training and education policy.
- Promote a system of workforce training and education that responds to the lifelong learning needs of the current and future workforce.
- Advocate for the nonbaccalaureate training and education needs of workers and employers.
- Facilitate innovations in policy.
- Ensure system quality and accountability by evaluating results and supporting high standards and continuous improvement.

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Executive Summary

Introduction

This is the second biennial outcome evaluation of Washington's workforce training system. It analyzes the results of nine of the state's largest workforce training and education programs plus employer-provided training. The programs account for 90 percent of public expenditures in the state training system.

The purpose of the evaluation is to report the results of workforce training and recommend areas for improvement. The report discusses the results of the programs in terms of the seven goals for the state training system established by the Workforce Training and Education Coordinating Board (WTECB). These goals are not static targets but conditions that should be increasingly true for all people.

1. **Competencies:** Washington's workforce possess the skills and abilities required in the workplace.
2. **Employment:** Washington's workforce finds employment opportunities.
3. **Earnings:** Washington's workforce achieves a family-wage standard of living from earned income.
4. **Productivity:** Washington's workforce is productive.
5. **Reduced Poverty:** Washington's workforce lives above poverty.
6. **Customer Satisfaction:** Workforce development participants and their employers are satisfied with workforce development services and results.
7. **Return on Investment:** Workforce development programs provide returns that exceed program costs.¹

Findings are from the following sources of data:

- Program records on over 65,000 individuals who left one of these programs during the 1995–96 school year.²
- Mail survey responses from approximately 1,000 employers during the fall of 1997.
- Telephone survey responses from approximately 2,250 former 1995–96 participants during the fall of 1997 and December 1996.

¹ This last goal is the subject of a net-impact and cost-benefit evaluation conducted by WTECB every five years.

² For ease of exposition, the report refers to these individuals as the 1995–96 participants.

- Computer matches with Employment Security employment records.
- Computer matches with community and technical college enrollment records.
- Telephone survey responses from approximately 200 potential program participants (Employment Service registrants likely to need training, but who were not enrolled in any of the programs included in the study).

In addition to research by the staff of WTECB, research was conducted under contract to the Board by Washington State University's Social and Economic Survey Research Center, Battelle Memorial Institute, and Starling Associates.

It is important to note that, except for secondary vocational education, **the participant results presented in this report are for all participants, not just those who completed their program.** Participants are defined as individuals who entered a program and demonstrated the intent to complete a sequence of program activities. The results are, therefore, affected by the number of participants who left their program before completion.

Readers are also cautioned not to make improper comparisons among programs or between the previous evaluation based on 1993-94 participants and current evaluation results. Some evaluation methodologies were improved, and different programs serve different populations for different purposes.

Program and Participant Characteristics

Figure 1 briefly describes the 9 programs included in this report.

The training programs are grouped into three clusters based on participant characteristics:

1. Programs Serving Adults.
2. Programs Serving Adults With Barriers to Employment.
3. Programs Serving Youth.

Throughout this report, results are grouped by these three clusters.

It is very important to consider the demographic characteristics of program participants. The single most important factor in determining program results is the characteristics of the individuals who entered the program. Programs serving participants who have significant work experience and basic skills can be expected to have higher labor market outcomes than those serving participants with little work experience and low levels of literacy.

Programs Included in *Workforce Training Results – 1998*

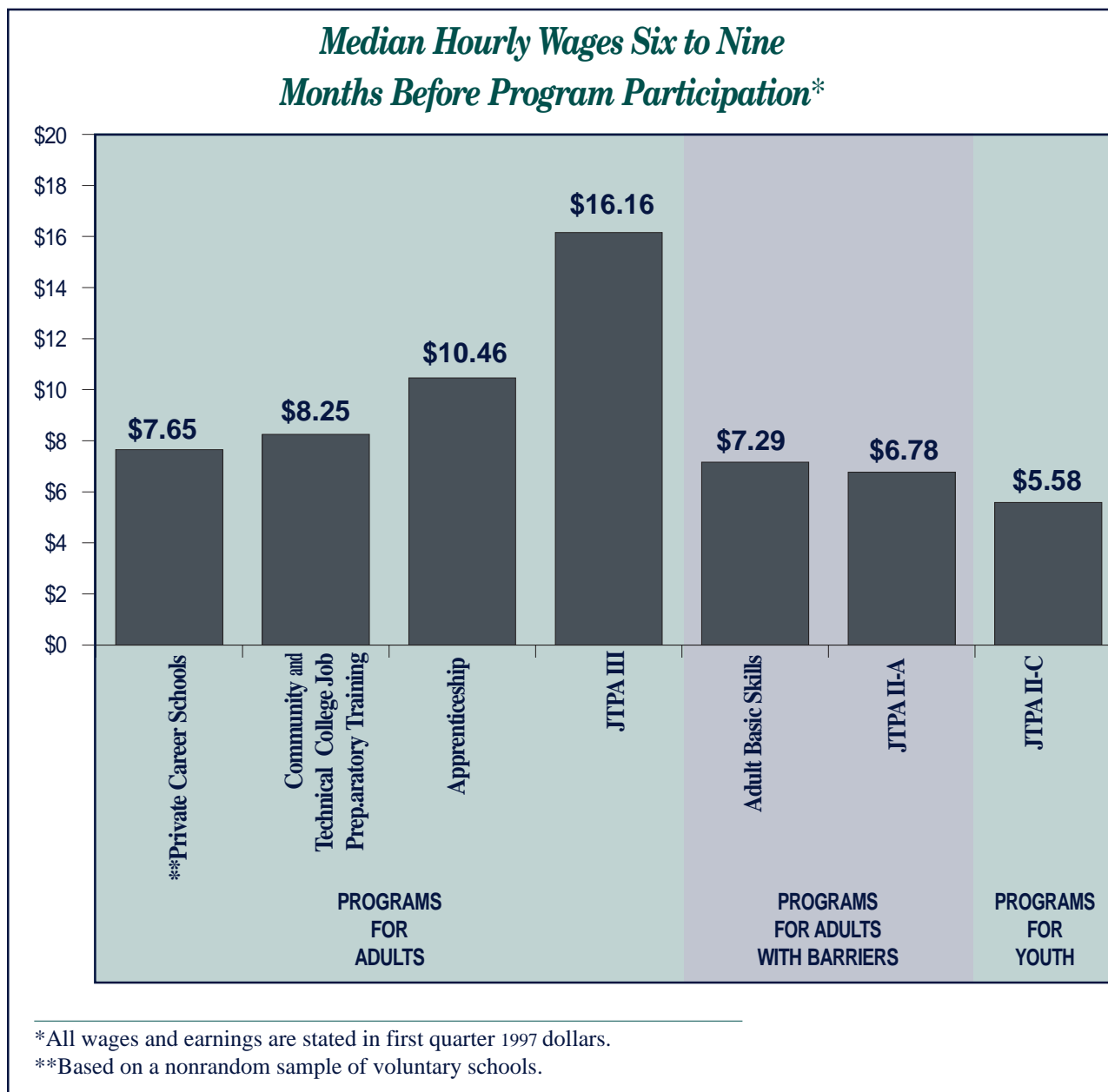
FIGURE 1

Programs Serving Adults	COMMUNITY & TECHNICAL COLLEGE JOB PREPARATORY TRAINING	Training and education for a Vocational Associates Degree or a Vocational Certificate. Also referred to as postsecondary vocational education, job preparatory training is the largest of the colleges' training programs. Job preparatory training does not include dislocated worker retraining or classes taken by current workers to upgrade skills for their current job, nor does it include the other two mission areas of the colleges—academic transfer education and basic skills instruction.
	PRIVATE CAREER SCHOOLS	Training provided by private businesses for students intending to complete vocational certificates or degrees. The schools are licensed by the Workforce Training and Education Coordinating Board or, if they grant a degree, by the Higher Education Coordinating Board. The Department of Licensing licenses cosmetology schools.
	APPRENTICESHIP	Training that combines classroom instruction with paid, on-the-job training under the supervision of a journey-level craft person or trade professional. Apprenticeships are governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries.
	JOB TRAINING PARTNERSHIP ACT TITLE III	Federal employment and training program for dislocated workers. The program is administered by the Employment Security Department (ES) at the state level and by 12 Service Delivery Areas (SDAs) at the local level, each headed by a Private Industry Council (PIC).
Programs Serving Adults With Barriers to Employment	ADULT BASIC SKILLS EDUCATION	Literacy and math instruction for adults who are at a high school level or below. Instruction includes courses in four categories: Adult Basic Education for adults whose skills are at or below the eighth grade level; English-as-a-Second Language; GED Test Preparation; and High School Completion for adults who want to earn an adult high school diploma. Instruction is provided by community and technical colleges and other organizations, such as libraries and community-based organizations, although the evaluation is limited to the colleges.
	JOB TRAINING PARTNERSHIP ACT TITLE II-A	Federal employment and training program for low-income adults age 22 and older who experience significant barriers to school or employment. The program is administered by ES at the state level and at the local level by 12 SDAs, each headed by a PIC.
Programs Serving Youth	SECONDARY VOCATIONAL-TECHNICAL EDUCATION	Training and vocational education in high schools and vocational skills centers in agriculture, family and consumer sciences, trade and industry, marketing, business, diversified occupations, community resources, technology, cosmetology, and health occupations.
	JOB TRAINING PARTNERSHIP ACT TITLE II-C	Federal employment and training program for low-income youth 16–21 years old who experience significant barriers to school or employment. The program is administered by ES at the state level and by 12 SDAs at the local level, each headed by a PIC.
	JOB TRAINING PARTNERSHIP ACT TITLE II-B	Federal employment and training program for low-income youth 14–21 years old who experience significant barriers to school or employment. The program provides employment for approximately eight weeks in the summer and remedial education. The program is administered by ES at the state level and by 12 SDAs at the local level, each headed by a PIC.

The preprogram wages of the participants is illustrative of the different economic situations of the three clusters of program participants. Most secondary vocational education students and Job Training Partnership Act (JTPA) II-B participants did not have reported

employment prior to entering their program. Among those who were employed three quarters prior to entering a program, the median wage was lowest for JTPA Title II-C participants and highest in the adult cluster. (See Figure 2.)

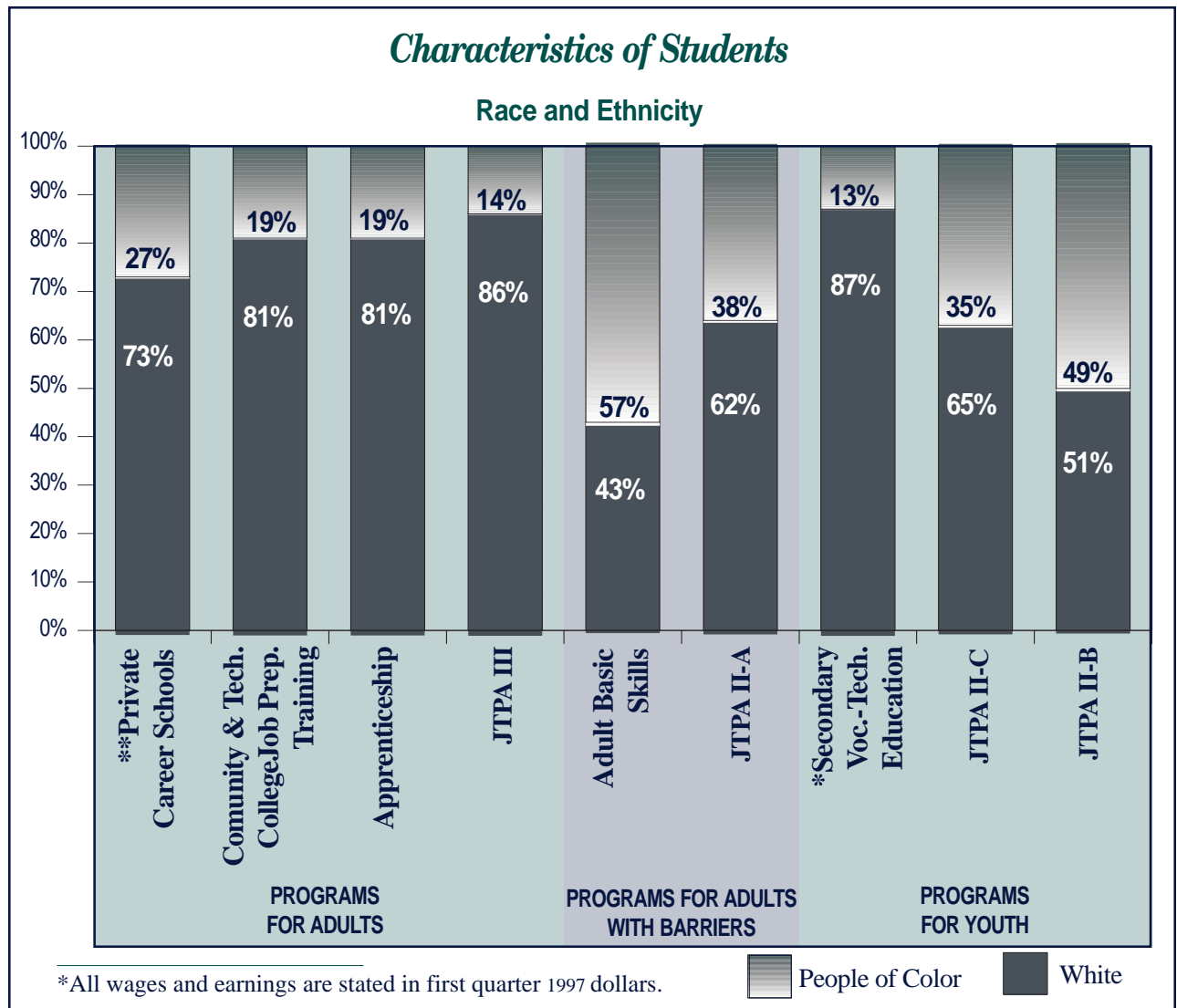
FIGURE 2



The racial and ethnic composition of participants in most programs was more diverse than the state's general population. Participants were most diverse in the cluster of programs serving adults with barriers to employment and in JTPA Titles II-B and II-C programs that target youth with barriers to employment. Also, the percentage of nonwhite participants in private vocational schools included in

the study was relatively high. (See Figure 3.) There was little change from the composition of 1993–94 participants studied by our previous evaluation. (There was a 13 percentage point increase in the percentage of secondary vocational education students who were white, but this may be associated with a difference in the schools that volunteered to take part in the study.)

FIGURE 3



Program Results

Competency Gains

Goal: *Washington State's workforce possess the skills and abilities required in the workplace.*

Among program participants who received job-specific skills training, almost all said their job-specific skills improved, and, in most cases, they said their skills improved a lot. Among participants who received job-specific skills training, between 50 and 74 percent, depending on the program, said their job-specific skills improved a lot. (See Figure 4.)

Not all program participants received job-specific skills training. Adult Basic Skills Education, by the definition used in the study, does not include vocational training and, therefore, is not included in the figure. JTPA programs offer a variety of job search assistance and basic skills instruction in addition to job-specific skills training. Between 19 and 33 percent of JTPA participants said they did not receive job-specific skills training before leaving their program. Also, the relatively low percentage of JTPA Title III participants who said their job-specific skills improved a lot may reflect the extensive skills already held by many dislocated workers before entering the program.

These findings are very similar to findings of the previous *Workforce Training Results*, except that there was an increase in the percentage of JTPA Titles II-A and II-C participants who reported that they received job-specific skills training.

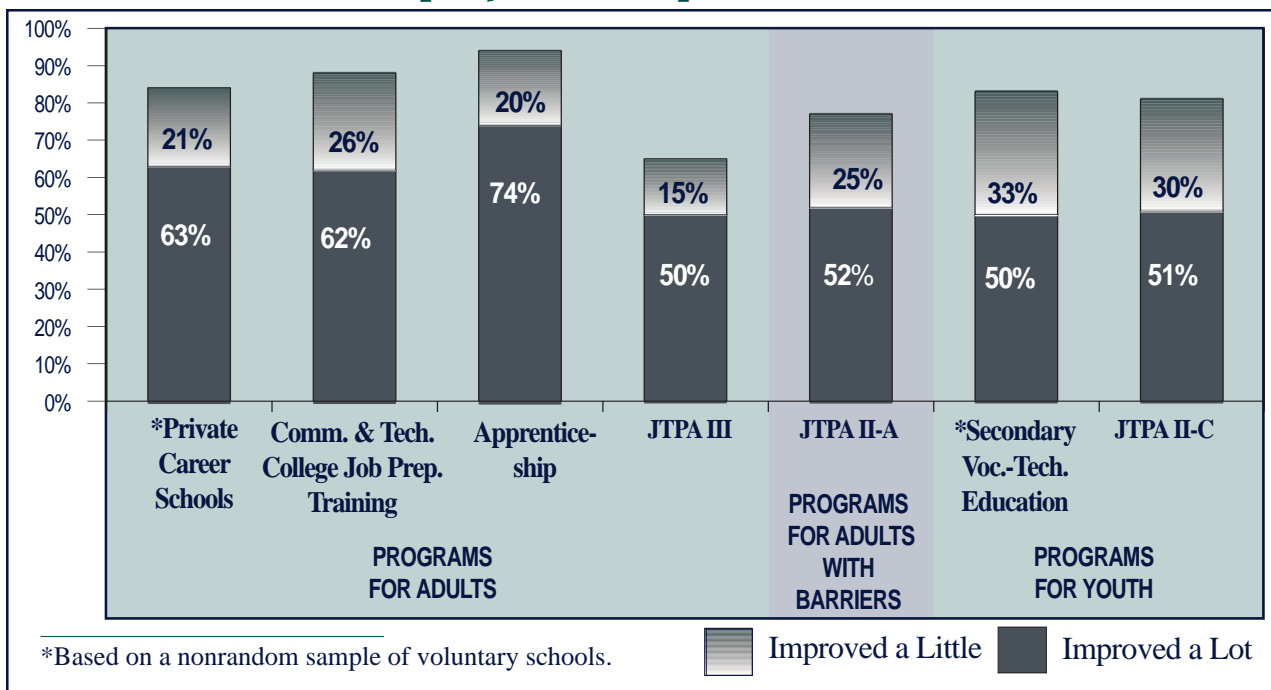
There were some gender differences in the types of training received by participants. Men were more likely to report training in the use of machinery. Women were more likely to report training in the use of computers.

Another measure of whether training provided participants with the right kinds of skills is whether the former participants believed their training was related to their postprogram employment. In most cases, a large majority of program participants indicated their training was related to the job they held nine months after leaving the program. (See Figure 5.) (No comparable question was asked in the previous outcome evaluation.)

The two programs with relatively lower results for job-relatedness of training were JTPA Title III and Adult Basic Skills Education. JTPA Title III serves dislocated workers who often possess job skills. As noted earlier, the program frequently provides participants with employment services other than training. In the case of Adult Basic Skills Education, it may be more difficult for survey respondents to understand the relationship of basic skills instruction, as opposed to job-specific skills training, to their job. It also may be evidence of the need to more frequently provide adult basic skills instruction in a work context.

FIGURE 4

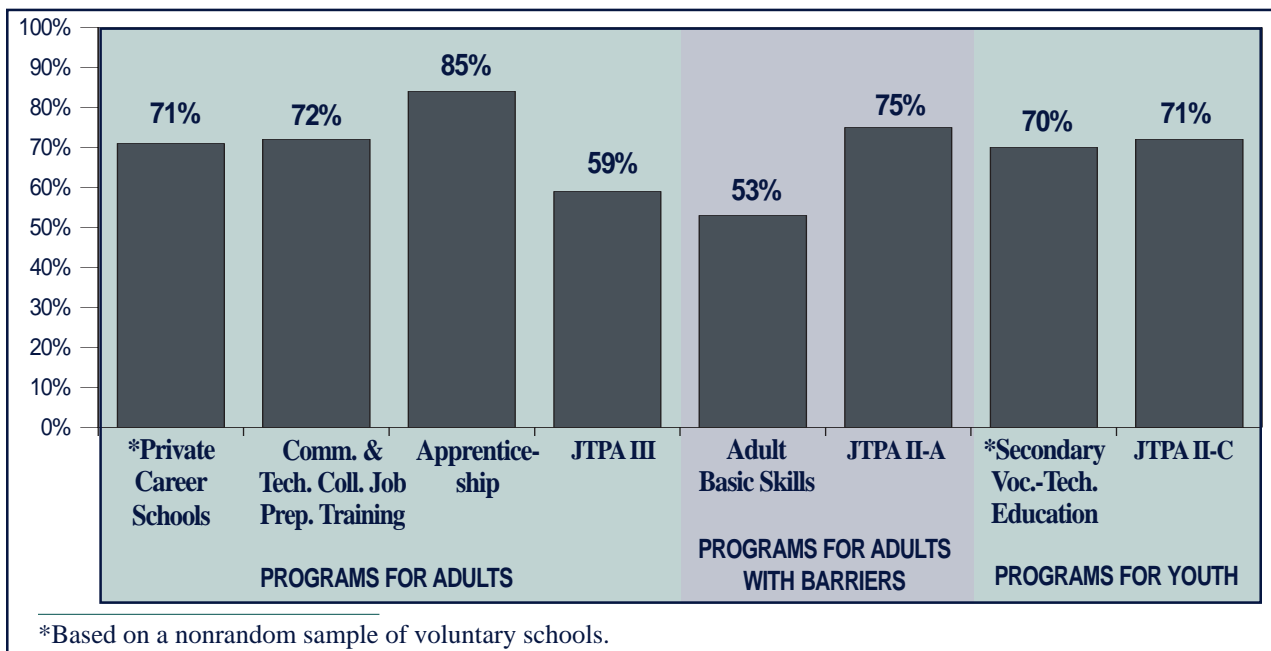
*Percentage of Participants Who Said
Their Job-Specific Skills Improved a Lot or a Little*



Training Related to Employment

(percentage of employed former participants who said training was related to job held nine months after leaving program)

FIGURE 5



Participant Satisfaction

Goal: *Workforce development participants and their employers are satisfied with workforce development services and results.*

The vast majority of participants were satisfied with the overall quality of their program. No fewer than 77 percent of participants were satisfied with the overall quality of any program included in the study. (See Figure 6.)

Participants were generally most satisfied with the quality of their program's instructors. The aspects of programs that seem to have the lowest participant satisfaction were support services, especially information about job openings. Participant satisfaction was also relatively low with career counseling, financial assistance, and child care. Participants were generally satisfied with the support services they received, but many did not receive the services they needed.

Participant satisfaction results are very similar to the findings of the previous *Workforce Training Results*. However, fewer participants reported the need for support services related to job placement than two years ago. This change may be due to improvement in the economy.

Employer Satisfaction

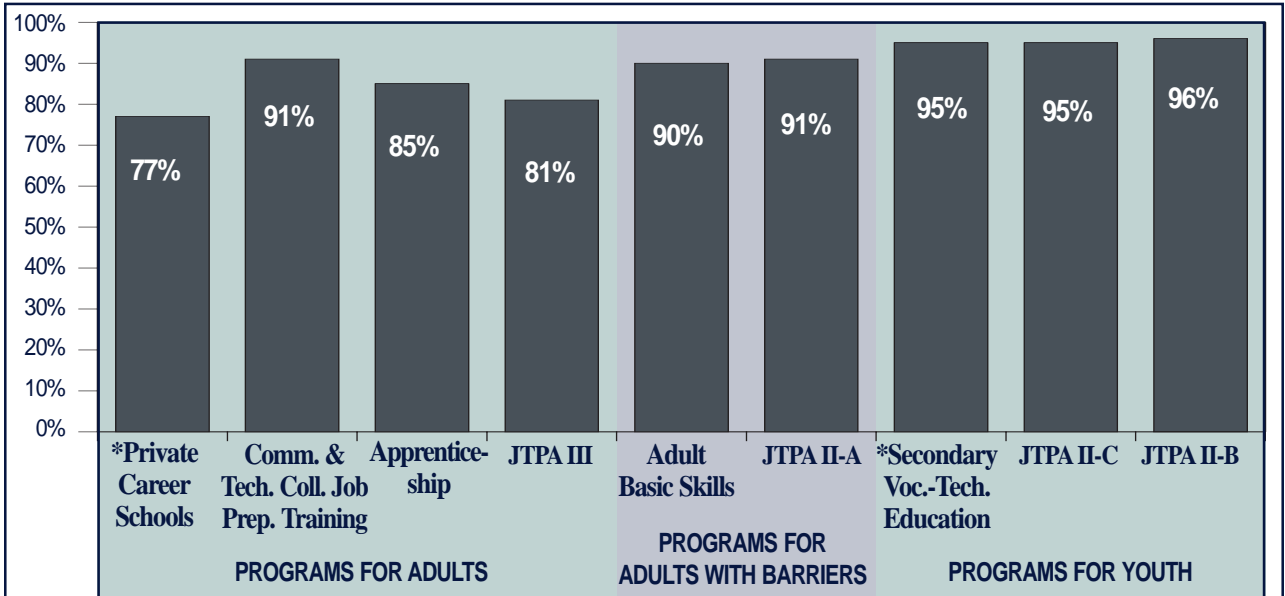
Goal: *Workforce development participants and their employers are satisfied with workforce development services and results.*

A majority of employers reported they were satisfied with the overall quality of the work performed by new employees who had recently completed one of these programs. The extent of satisfaction, however, was not as high as one would like. Between 52 and 71 percent of employers, depending on the program, reported they were satisfied with the overall quality of work by these new employees. (See Figure 7.)³

³ These employer satisfaction survey responses are not comparable between the 1995 and 1997 surveys because of a change in the response scale. The 1995 survey asked employers if they were very satisfied, somewhat satisfied, or very dissatisfied. The 1997 survey asked employers if they were very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied. Moving to a four-point response scale would, by itself, tend to lower the percentage reporting some degree of satisfaction.

*Percentage of Participants Satisfied
With Overall Quality of Their Program*

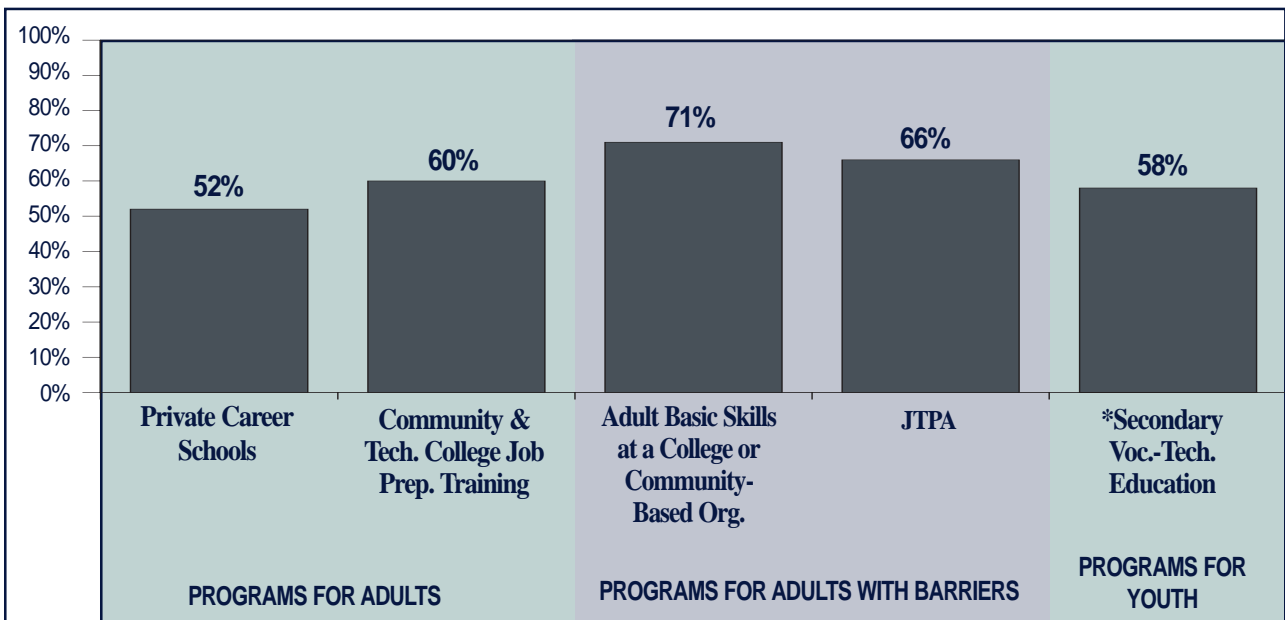
FIGURE 6



*Based on a nonrandom sample of voluntary schools.

*Percentage of Employers Satisfied With the
Overall Quality of Work Performed by New Employees
Who Recently Completed the Program*

FIGURE 7



Employers were most satisfied with the productivity and basic skills of new employees who had recently completed one of these programs. Employers were least satisfied with the communication, computer, and general workplace skills of these employees, such as the ability to solve problems, work habits, and teamwork. The previous employer survey found employer satisfaction to be relatively lower with computer, problem solving, and math skills.

Employment

Goal: Washington's workforce finds employment opportunities.

In most cases, 80 percent or more of the program participants reported having a job during the third quarter (6 to 9 months) after they left their program. The exceptions to this general result were Adult Basic Skills Education and JTPA Title II-C. (See Figure 8.)

The employment rates are typical of the national employment rates for individuals with such educational attainments. For example, nationwide 83 percent of individuals with a two-year college degree are employed.

JTPA Title II-C serves economically disadvantaged youth and typically provides five months of service. Median participation in Adult Basic Skills Education was between three and six months, and the study was limited to students who did not also participate in college vocational training. Our earlier net-impact evaluation

and studies by others have shown that adult basic skills instruction that is not coupled with vocational training does not typically improve employment results.

Across most programs, the current study found slightly higher employment rates (1 to 4 percentage points higher based on the Employment Security Department records) than were found two years earlier in the previous *Workforce Training Results*. This may reflect the better job market of 1997.

Earnings

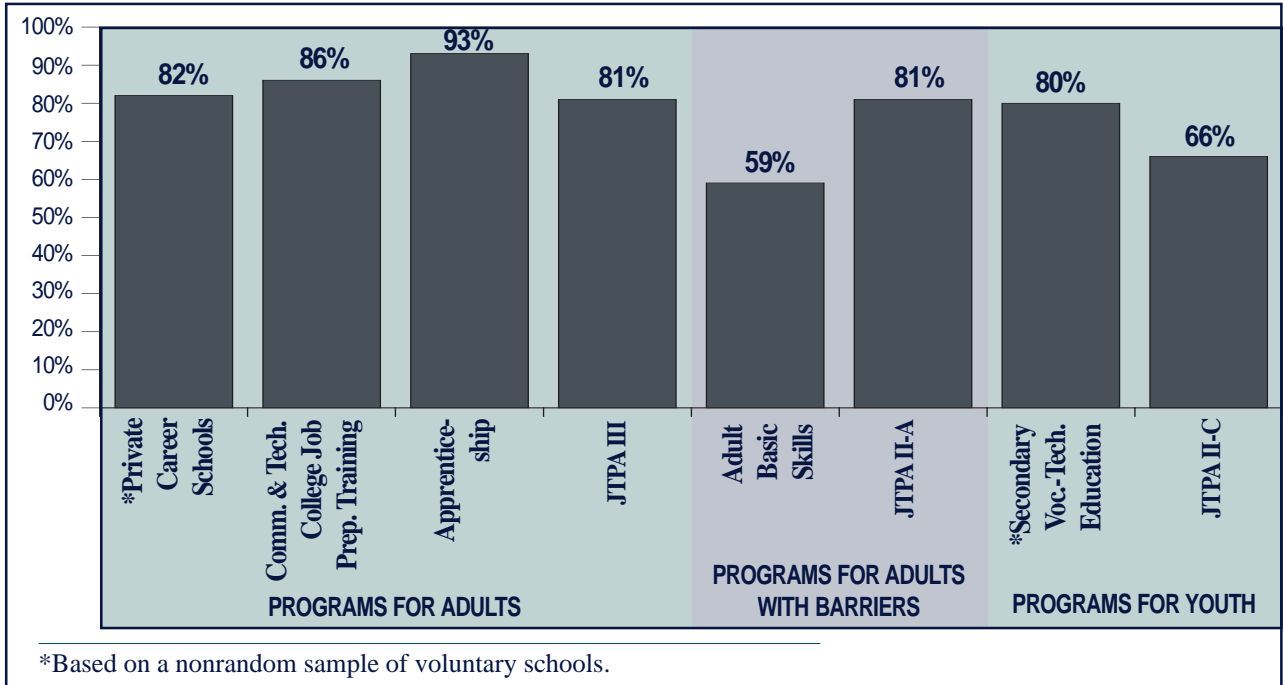
Goal: Washington's workforce achieves a family-wage standard of living from earned income.

Postprogram earnings are very much affected by the characteristics of the participants who entered the program. Participants in programs serving youth had the lowest postprogram hourly wages and quarterly earnings, and participants in programs serving adults had the highest postprogram wages and earnings.⁴ (See Figure 9.)

⁴Earnings equal wage times the number of hours of work. It is not valid methodologically to subtract the wage levels in Figure 2 from those in Figure 9 to obtain a measure of pre-post change in hourly wages.

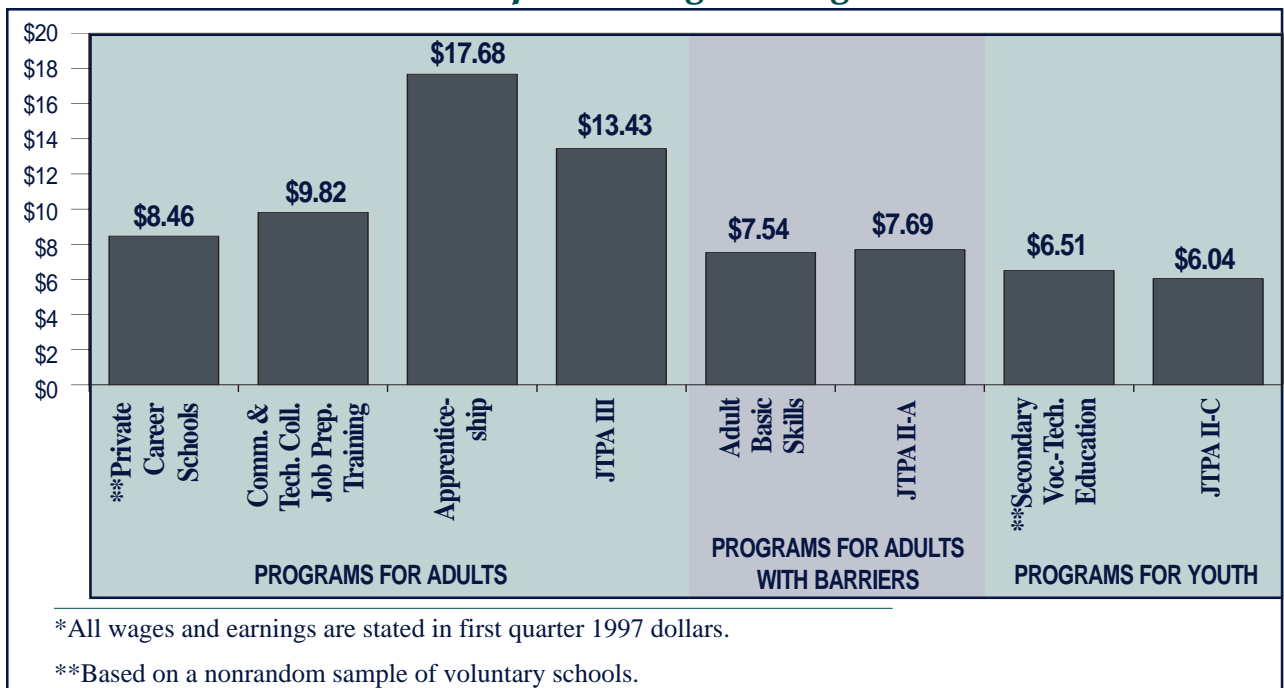
Percentage of Participants Reporting Employment Six to Nine Months After Leaving Their Program

FIGURE 8



Median Hourly Wage Six to Nine Months After Leaving the Program*

FIGURE 9



Earnings and hourly wages were particularly high for individuals who participated in apprenticeship. In addition to the quality of the program, this finding reflects the length of the training, the prior earnings of participants, and the labor market in their occupations and industries. JTPA Title III participants also had relatively high earnings and wages. This reflects the greater job experience of the program's participants.

In most programs, hourly wages and quarterly earnings were slightly higher, even after controlling for inflation, than were found two years ago in the previous *Workforce Training Results*. The one program with a very large increase in wages and earnings was JTPA Title III. This may be due, at least in part, to a large increase in participants coming from and going back to the aerospace industry.

For most programs, postprogram earnings and hourly wages were lower for women than for men who participated in the same program. Racial and ethnic differences varied considerably among programs, although for many programs wages and earnings tended to be lower for Native Americans. These differences in postprogram wages and earnings by gender and race/ethnicity generally reflected differences in wages and earnings prior to program enrollment and gender and race/ethnicity differences in the overall labor market.

Employer-Provided Training

Training that employers offer or support for their own employees is a major part of the training that occurs in the state (and is defined in statute as part of the state training system). WTECB estimates that employer expenditures on training are roughly equivalent to the amount of public expenditures on workforce development. Based on our 1997 survey of Washington employers, most employers provided or paid for at least some training for their own employees. Almost all employers, 94 percent, said they provided at least some on-the-job training to employees, and 71 percent said they provided at least 4 hours of classroom training in the previous 12 months.

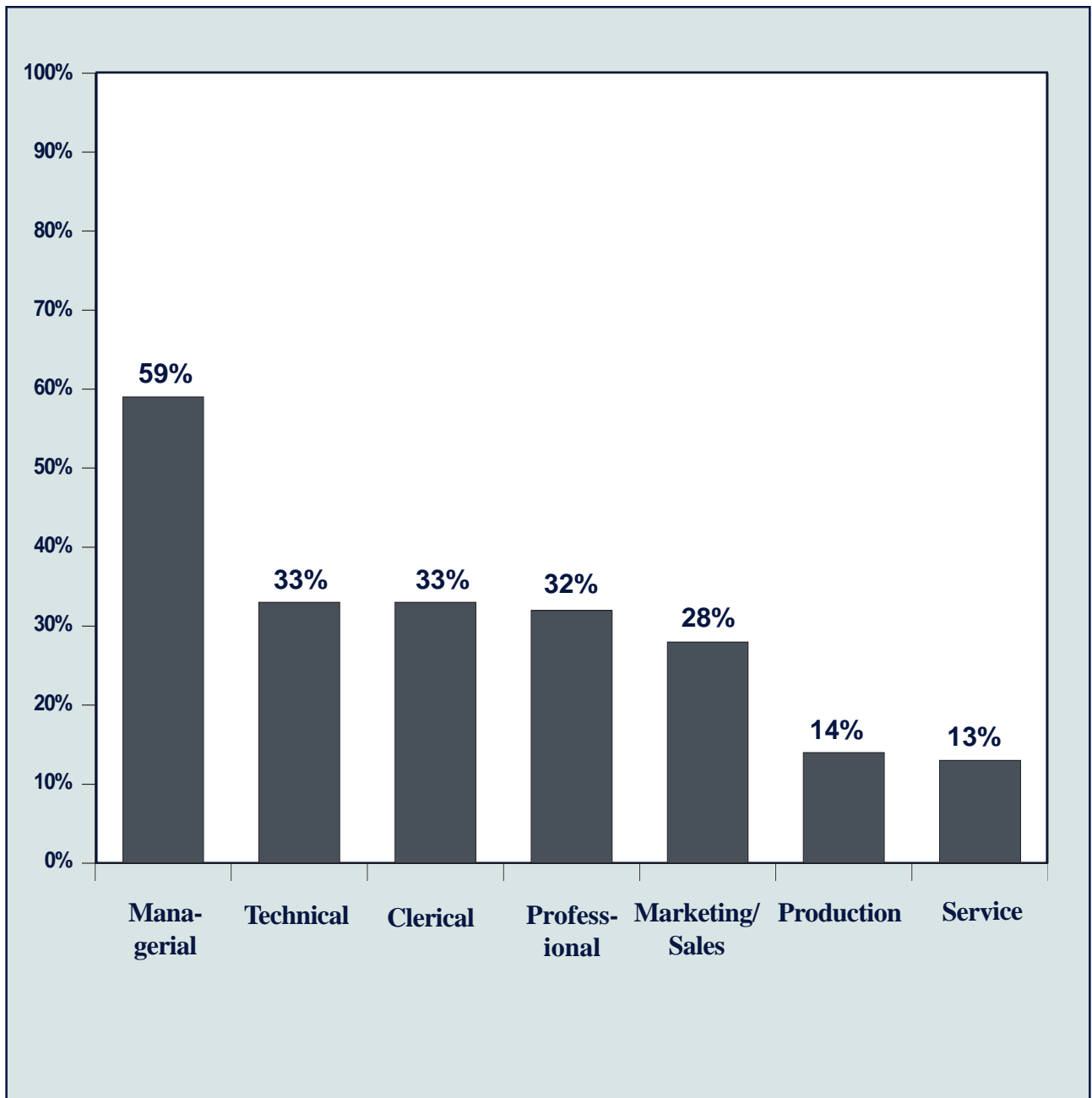
The extent of training has been increasing. Fifty-three percent of employers said that in the last three years they have increased the percentage of employees to or for whom they provided classroom training.

Employer-provided classroom training is heavily skewed toward training managerial employees as opposed to production or service workers. (See Figure 10.) The average response of employers was that they provided classroom training to 59 percent of their managers and to just 14 and 13 percent, respectively, of their production and service workers.

Percentage of Employees Who Received Employer-Provided Training

(mean employer estimate; at least 4 classroom
hours in the last 12 months)

FIGURE 10



Employers seldom provide basic skills instruction to their employees. Only 10 percent of employers reported they provided even 4 hours of instruction in reading, writing, or math to any employees in the last 12 months. (See Figure 11.)

In order to provide their current workers with training, even classroom training, employers usually turned to their own personnel or to private training contractors. Few employers used public providers of training. (See Figure 12.)

Among the relatively few employers who used a public community or technical college for training for their current workers, almost all were satisfied with the training. Sixty-two percent of employers who used a community or technical college to provide job-specific training responded they were very satisfied, and 36 percent said were somewhat satisfied with the training.

These results are similar to the findings from our previous 1995 survey of employers, although there were some changes.

In 1997, 11 percent more employers said they provided some classroom training to their employees than said so in 1995. In 1997, however, employers reported they provided classroom training to fewer of their production and service workers. Also in 1997, employers even more frequently said they used their own personnel to train their workers. (The previous survey did

not ask about satisfaction with community and technical college training for current workers.)

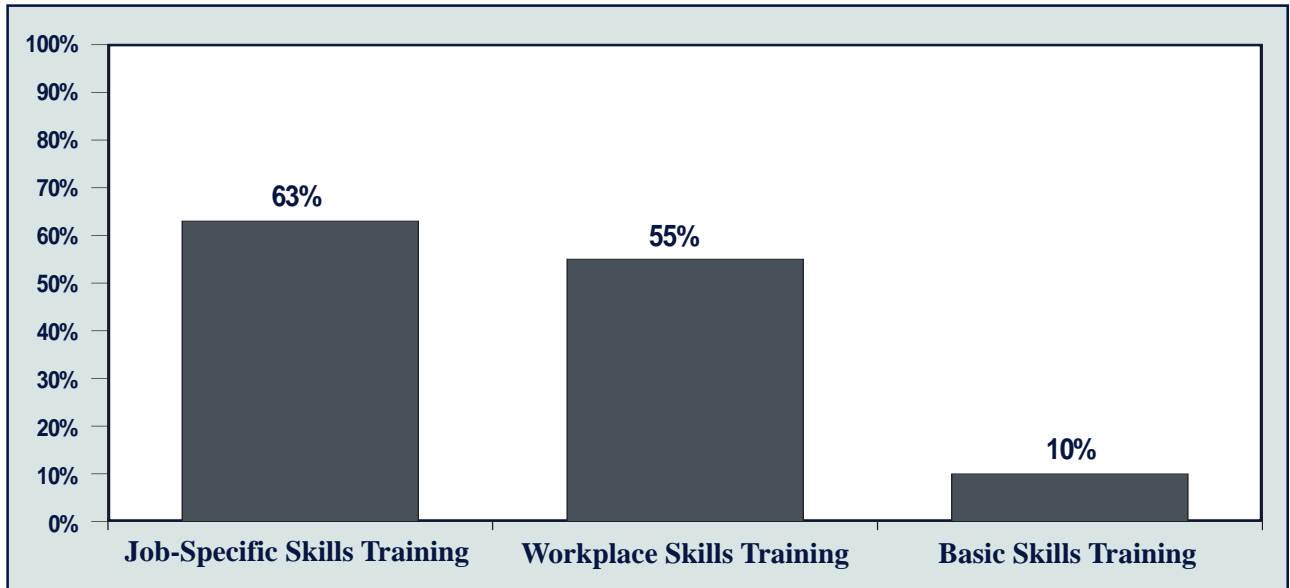
Areas of Strength and Areas for Improvement

Based on these findings, several areas stand out as areas of strength across the training system. Participant satisfaction was generally quite high. Participants were especially satisfied with the quality of their instructors. There was an increase from two years ago in the percentage of participants who said they received job-specific skills training. The majority of participants who received job-specific skills training, said that their skills improved a lot. A large majority of participants who received support services, said their needs were met. For most programs, at least 70 percent of participants who were employed after their training said their training was related to their job. Employment rates and earnings were, for the most part, a little higher than found by our previous evaluation of 1993–94 participants.

*Percentage of Employers Providing
Classroom Training to any Employees*

(at least 4 hours in the last 12 months)

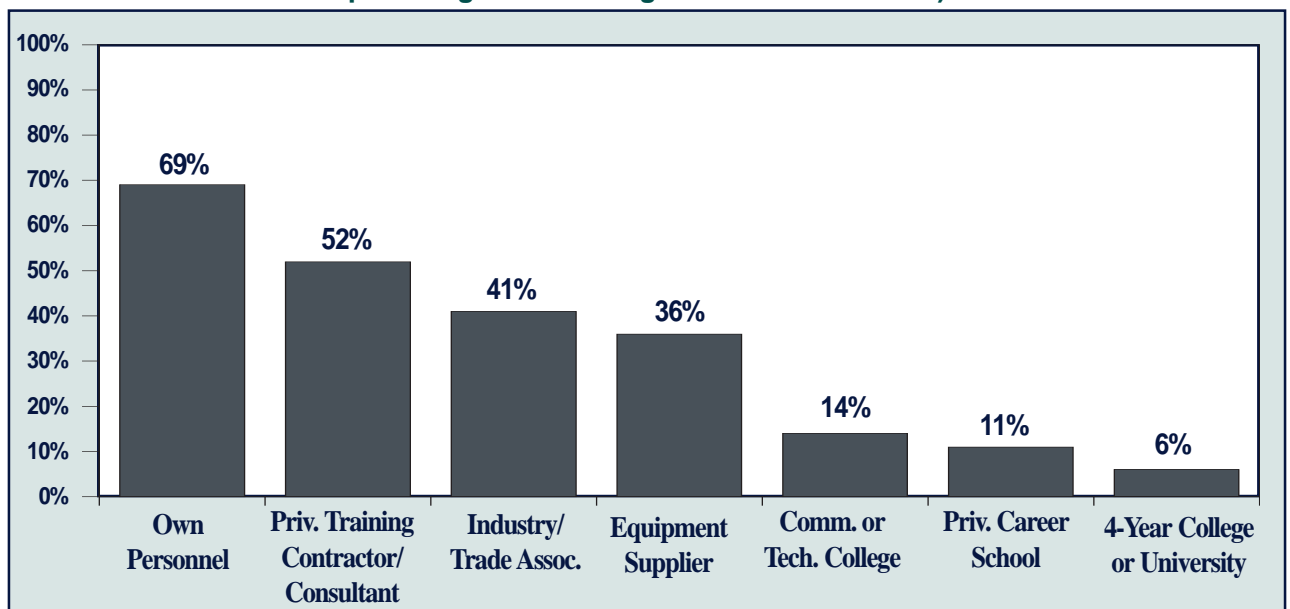
FIGURE 11



*Percentage of Employers Who Used
Providers of Job-Specific Classroom Training*

(mean employer response among employers
providing such training in the last 12 months)

FIGURE 12



Across the training system, there are other areas that are relatively weaker and should be targeted for improvement. (See Figure 13.) **The skill areas that most often need to be improved are communication skills, computer skills, and the general workplace skills of problem solving, teamwork, and good work habits.** Most programs serving youth and adults with barriers to employment also need to improve basic skills in reading, writing, and math. Improvement in these skill areas would increase employer satisfaction with program completers.

The support services that most often need to be improved are information about job openings, career counseling, financial assistance, and child care. In most cases, access is the issue rather than the quality of service that is provided.

Most programs also have more work to do if they are to eliminate gender differences in labor market outcomes. **Prior to enrolling in their program, most women had lower wages and earnings than did men who enrolled in the same program. After leaving their program, most women were still paid less than men who had participated in the same program.** Such gender differences, however, do exist in the overall labor market.

In addition to these program findings, our survey of potential training participants shows that **more individuals who need training might participate if information about**

training programs was more widely available, especially information about financial assistance to attend college and the availability of JTPA and other government programs. Also, more potential participants would likely attend a community or technical college if more classes were held at convenient times for working adults.

Finally, training provided by employers to their own employees is also an important part of the training system in the state. The evaluation finds that **employers should do more to provide training to production and service workers and to provide basic skills instruction to employees with low literacy and math skills.**

Areas for Improvement

The following charts summarize the aspects of each program that are relatively weaker than other aspects of the same program.

FIGURE 13

Programs for Adults			
COLLEGE TRAINING	PRIVATE CAREER SCHOOLS	APPRENTICESHIP	JTPA TITLE III
Computer skills Communications General workplace skills Support service access Gender differences Native Americans	General workplace skills Communications Support services access	Math skills General workplace skills Gender differences Minority groups retention	Information about job openings Career counseling

Programs for Adults With Barriers to Employment	
ADULT BASIC SKILLS EDUCATION	JOB TRAINING PARTNERSHIP ACT TITLE II-A
Basic skills Communications skills General workplace skills Relatedness to work Computer skills Support service access Gender differences Native Americans	Basic skills Communication skills General workplace skills Computer skills Targeting higher paying occupations Information about job openings Gender differences

Programs for Youth		
SECONDARY VOCATIONAL-TECHNICAL EDUCATION	JTPA TITLE II-B	JTPA TITLE II-C
OSPI data collection Computer skills Communication skills Problem solving Work habits Information about job openings Gender differences	Connection between summer and school year education Connection between learning at work and in the classroom	Basic skills Communication skills Information about job openings Targeting higher paying jobs Gender differences

Workforce Training Results—1998 Exec. Summary Satisfaction Survey

The Workforce Training and Education Coordinating Board is committed to high quality customer satisfaction and continuous improvement. You can help us meet our commitment by completing this form, detaching it, and mailing it in. Please circle the words that best answer the following questions. In the space provided please elaborate on your response, if appropriate. Alternatively, you may access a form on our website and complete it electronically.

1. How useful are the ideas presented in this report?	Not Useful	Somewhat Useful	Very Useful
2. How clear are the ideas presented in this report?	Not Clear	Somewhat Clear	Very Clear
3. How useful are the recommendations?	Not Useful	Somewhat Useful	Very Useful
4. How clear are the recommendations?	Not Clear	Somewhat Clear	Very Clear
5. How complete is the information?	Not Complete	Somewhat Complete	Very Complete
6. How accurate is the information?	Not Accurate	Somewhat Accurate	Very Accurate
7. How is the information presented?	Not Enough Detail	Right Amount Detail	Too Much Detail
8. How is the length of the document?	Too Short	About Right	Too Long
9. Are there enough charts and graphs mixed in with the text?	Not Enough Charts	Good Balance	Too Many Charts
10. Would you like to see this report on the Internet? Yes ____ No ____			
11. Do you want additional copies of this report? Yes ____ Quantity _____ No ____ (If yes, please provide us with your name and address on the next page.)			
12. How did you expect to use this report? How have you used this report?			
13. How can this report be made more useful in future editions? What additional information would you like to see in subsequent reports?			

Please Tell Us About Yourself

JOB TITLE	SECTOR Public ____ Private ____ Nonprofit ____	YOUR ZIP CODE
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Does your organization provide training services to clients? Yes ____ No ____

Would you like to be contacted about future WTECB initiatives in this field? Yes ____ No ____

If we have any questions about what you have written here, may we contact you? Yes ____ No ____

(If you answered “yes” to this question or question #11 on previous page, please fill out the following.)

NAME	ADDRESS	
TELEPHONE #	FAX#	EMAIL ADDRESS